

# Conducting Ergonomic Assessments

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# Disclaimer

This presentation is not intended to take the place of medical advice.

Always refer to the medical provider's opinion.

Purpose is for an overview of conducting ergonomic assessment. This is not an all-encompassing list.



# Introduction

## Definition of Ergonomics

- The scientific discipline concerned with understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, methods and data to design in order to optimize human well-being and overall system performance

# Introduction

Simply Put:

- Fitting the job to the worker.
  - Hierarchy of Controls (discussed later in presentation)

# Why is Proper Ergonomics Important?

Musculoskeletal disorders on the rise in public and private sectors.

Workers' compensation claims can be difficult to disprove.

Outside factors often influence.

Current and future work environments.



# Causation of Injuries or MSDs

Overexertion.

Bodily Reaction.

Repetitive Motion.



# Symptoms of MSDs

Affect the muscle, nerves, blood vessels, ligaments, and tendons.

Symptoms include, but not limited to:

- Discomfort
- Pain/stiffness
- Numbness
- Loss of motion
- Swelling

# Commonly Affected Areas

Back and neck.

Hands, wrists and fingers.

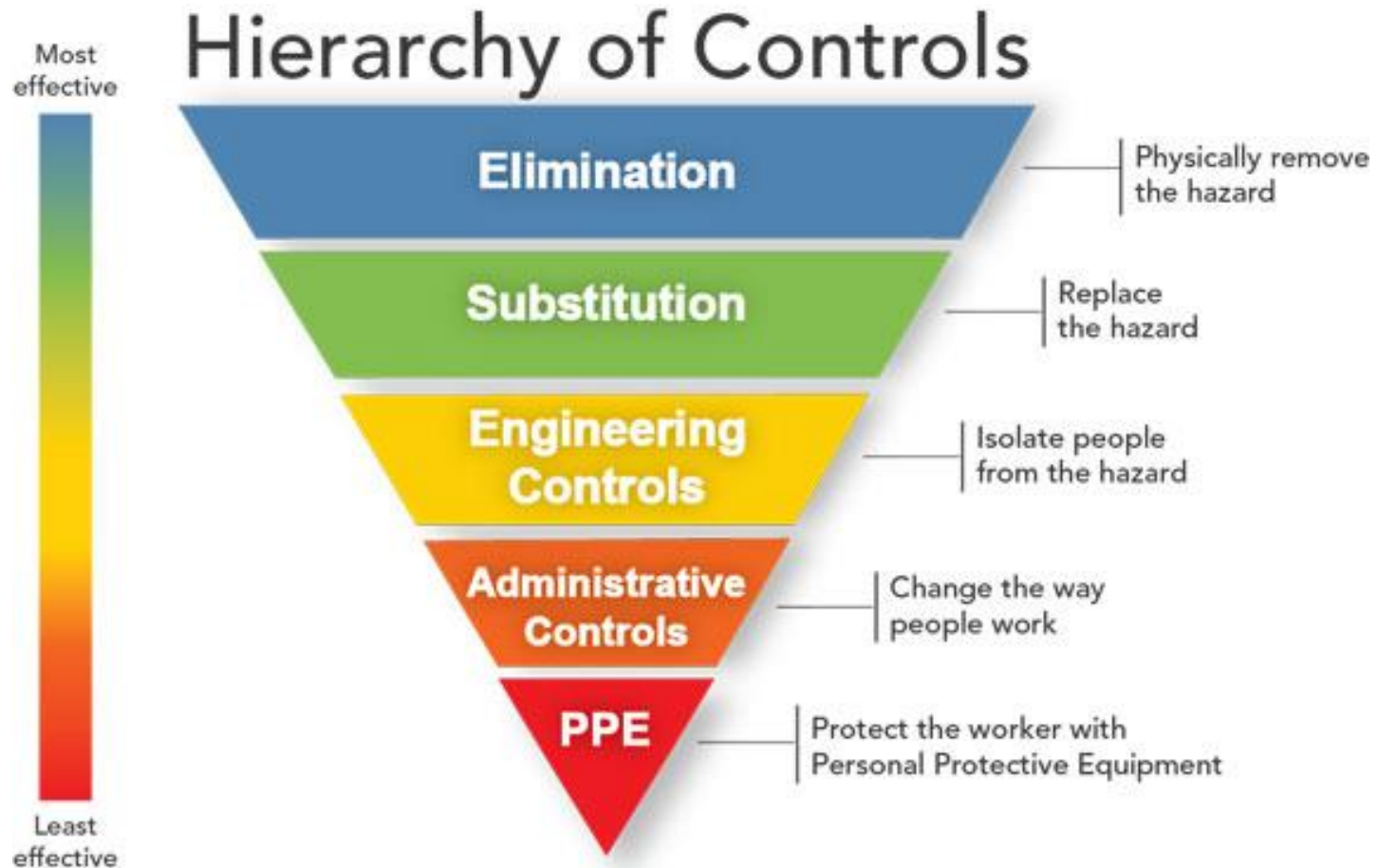
Arms, elbows and shoulders.

Knees, ankles and feet.





# Preventing or Controlling



# Control Method Examples

## Elimination

- Is task required?

## Administrative

- Training, work rotation, rest breaks, etc.

## Substitution

- Different equipment for task?

## PPE

- Gripping gloves, lifting straps, knee pads, etc.

## Engineering

- Workstation design.



# Control Methods

## Documented Ergonomics Program

- Include employee training and feedback.

## Conduct Job Hazard Analysis (JHA)

- Identify potential harmful tasks before problems arise.

## Self-Assessments.

- New hires, after moves, and periodic communications.

## Conduct Preventative Ergonomic Assessments.

## Positive Injury Reporting Policy and Safety Concerns.

# Control Methods

Job Hazard Analysis		
Tasks	Hazards	Controls

# What Are You Looking For?

Work Positions and Postures.

- Neutral position?

How Often the Task is Performed.

- Repetitive motion?

Level of Required Effort.

- Is employee overexerting?

Duration of the Task.

- Performing task for long periods of time?

# During and After Assessments

Listen to Employees and their Concerns.

- Employees often just want to be heard.

Involve Employees in Solutions.

- Employees often know what needs to be done.

Explain the Process During.

- Thoroughly explain each part that you are looking at.

Document with Report.

Follow Up After Period of Time.

- Ultimately up to the employee to make changes.

# Compliance

No OSHA Standards for Ergonomics.

Employers Required to Provide Safe/Healthy Workplace.

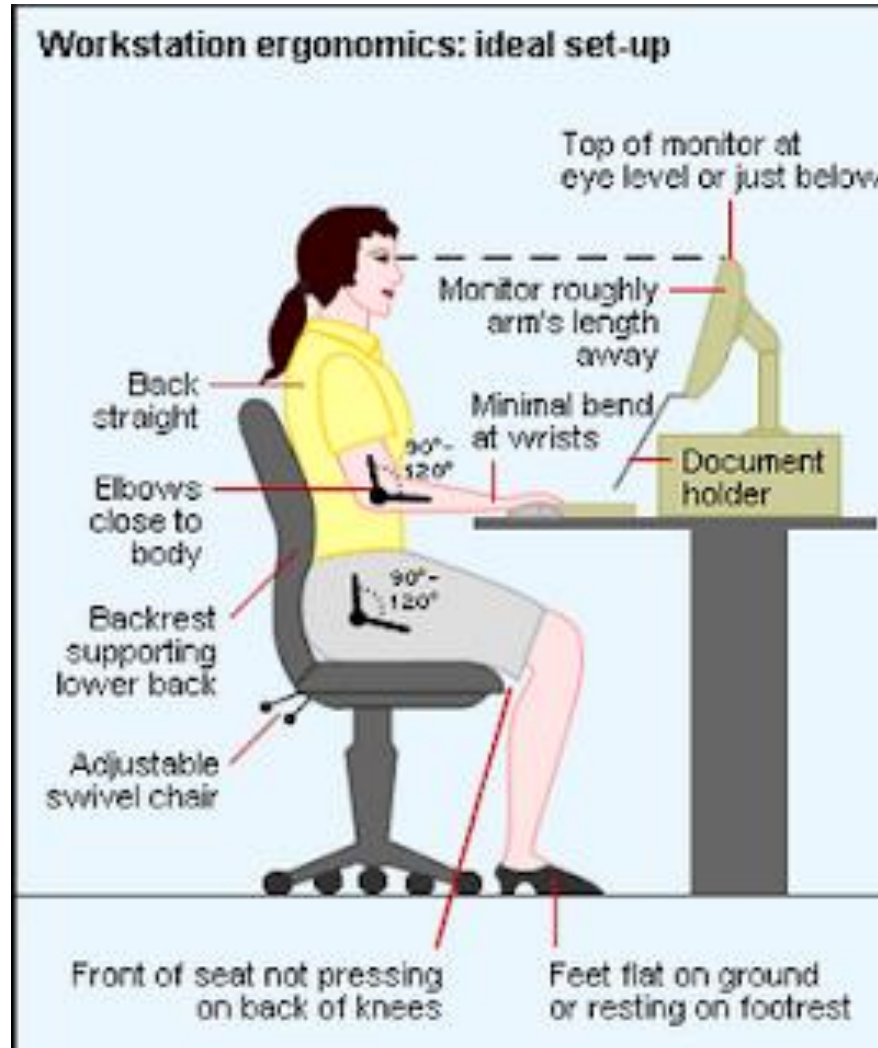
- OSHA General Duty Clause.

Right Thing to Do!

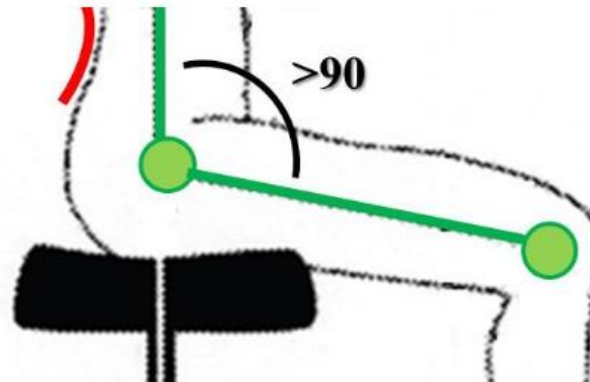
# Conducting Ergonomic Assessments



# Seated Posture



# Seated Posture Continued



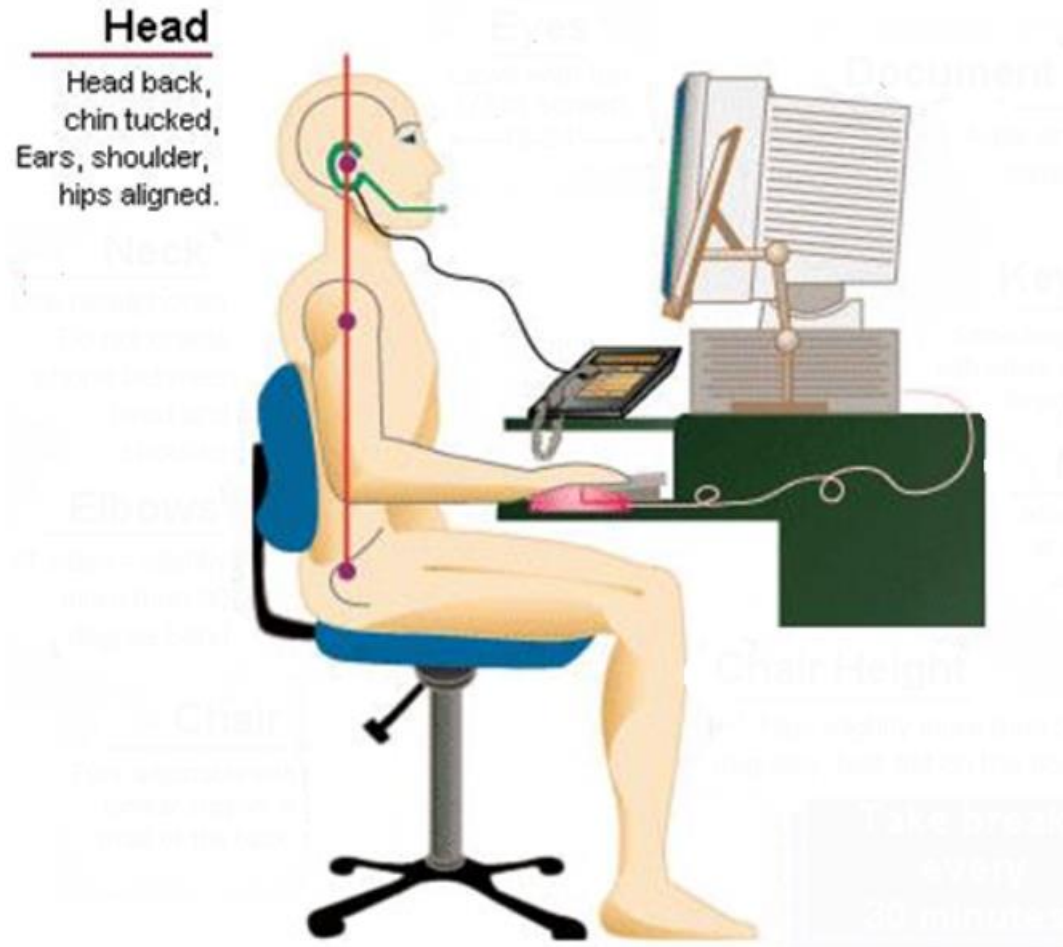
# No Twisting



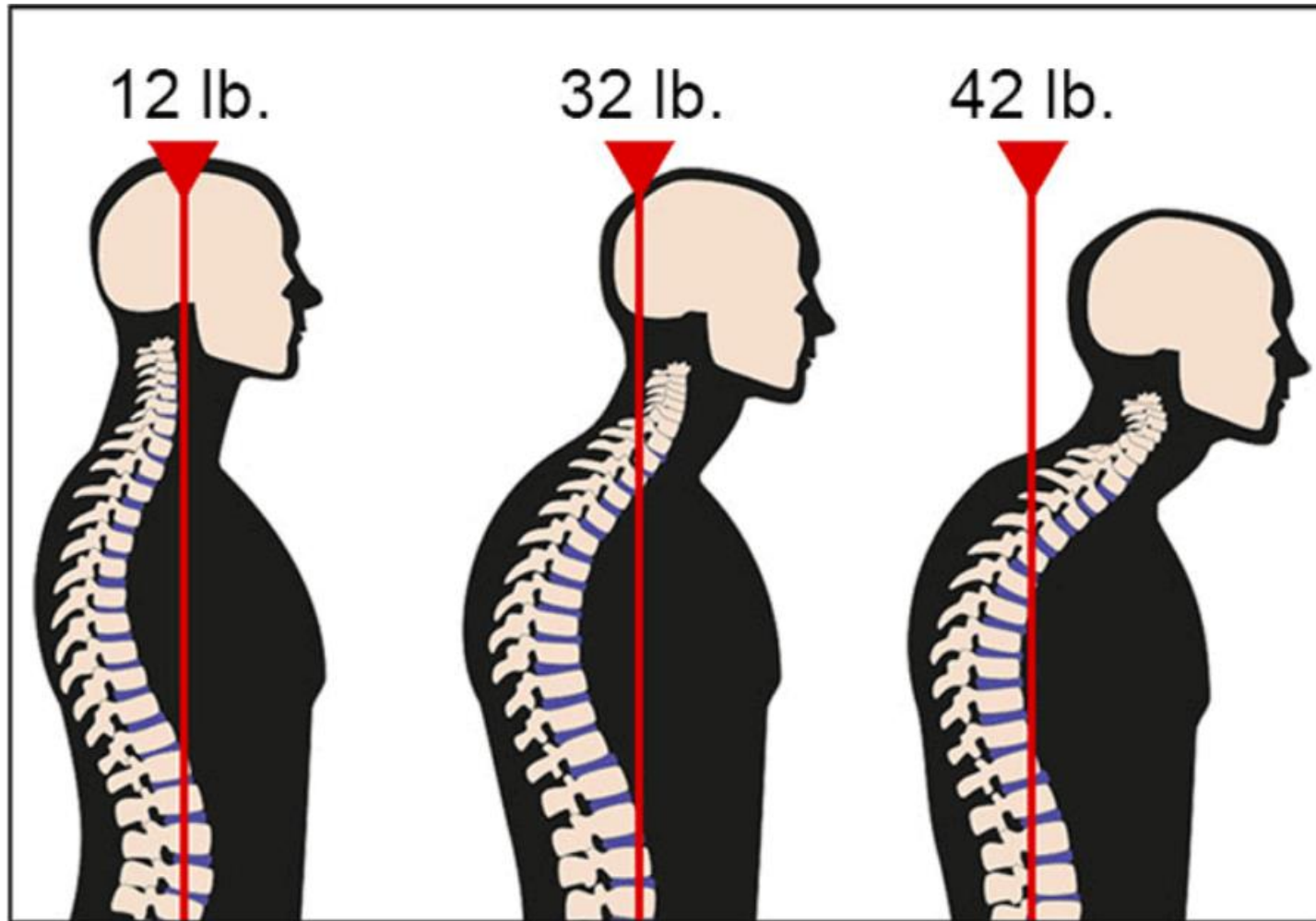
# Minimal Reach



# Head Position

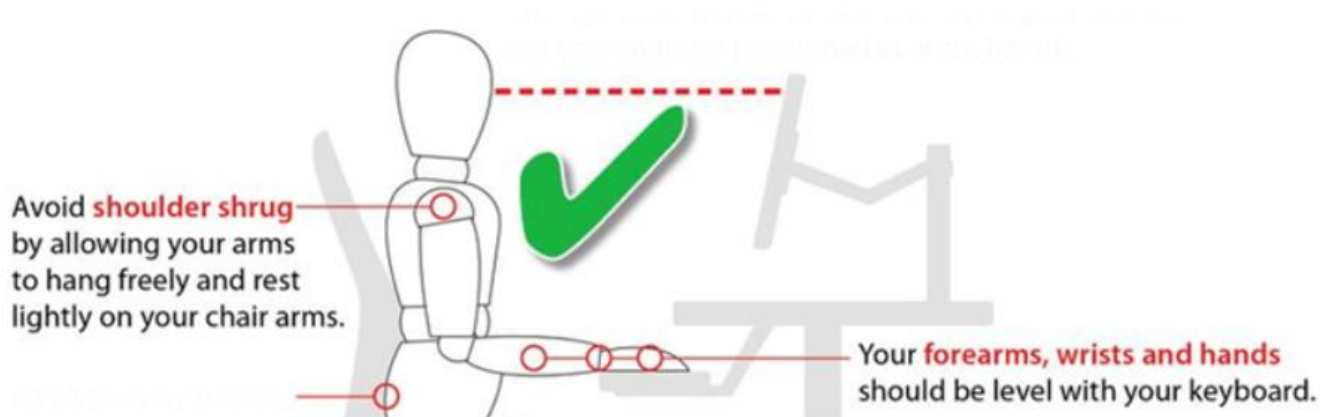


# Head Position Continued

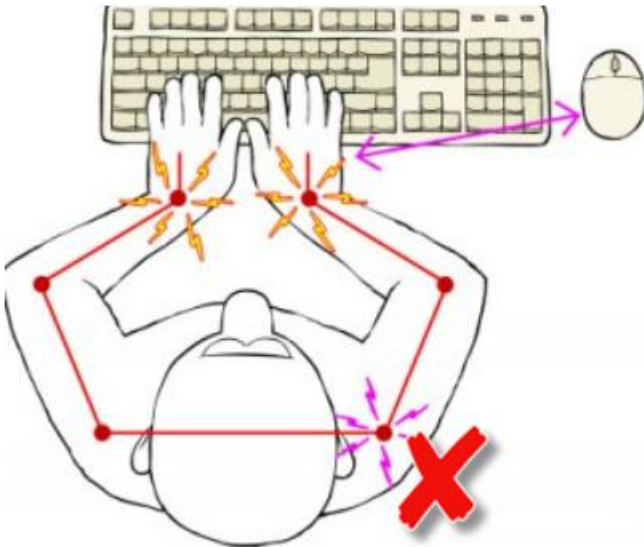




# Head Position Continued

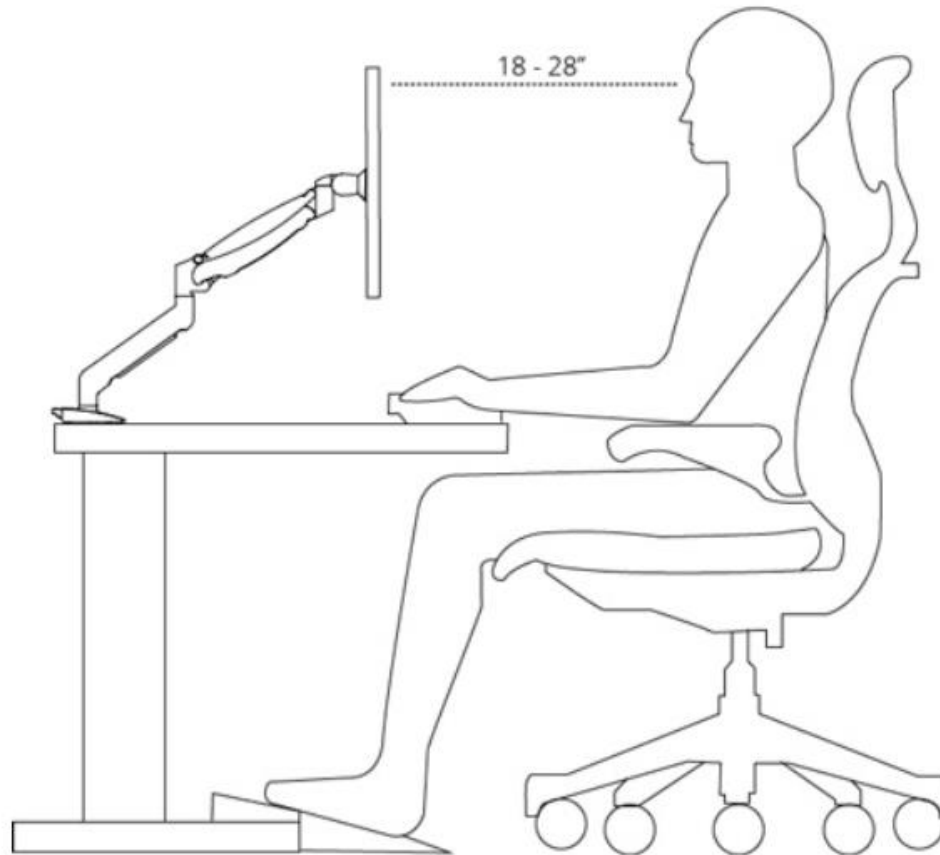


# Wrist Position

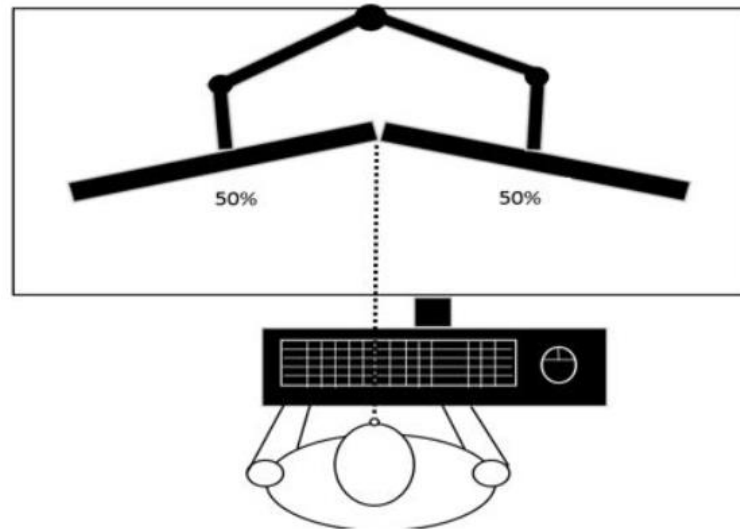
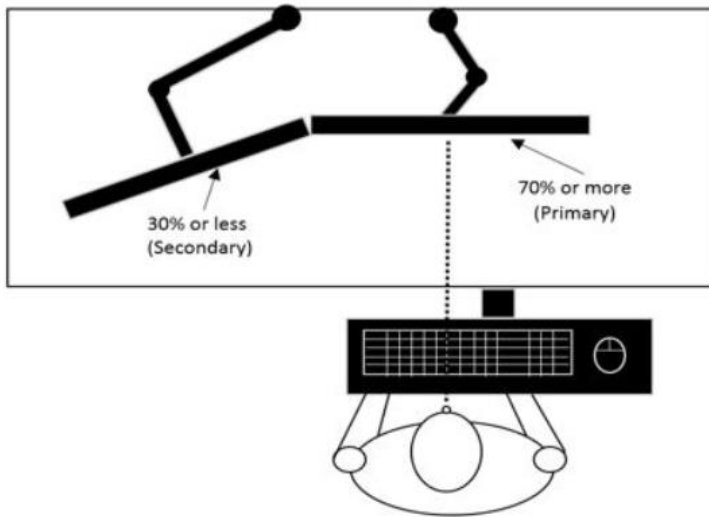




# Location of Computer Monitors



# Computer Monitors Continued



# Minimizing Eye Strain

## 20-20-20 RULE



EVERY  
MINUTES **20**



BREAK FOR  
SECONDS **20**

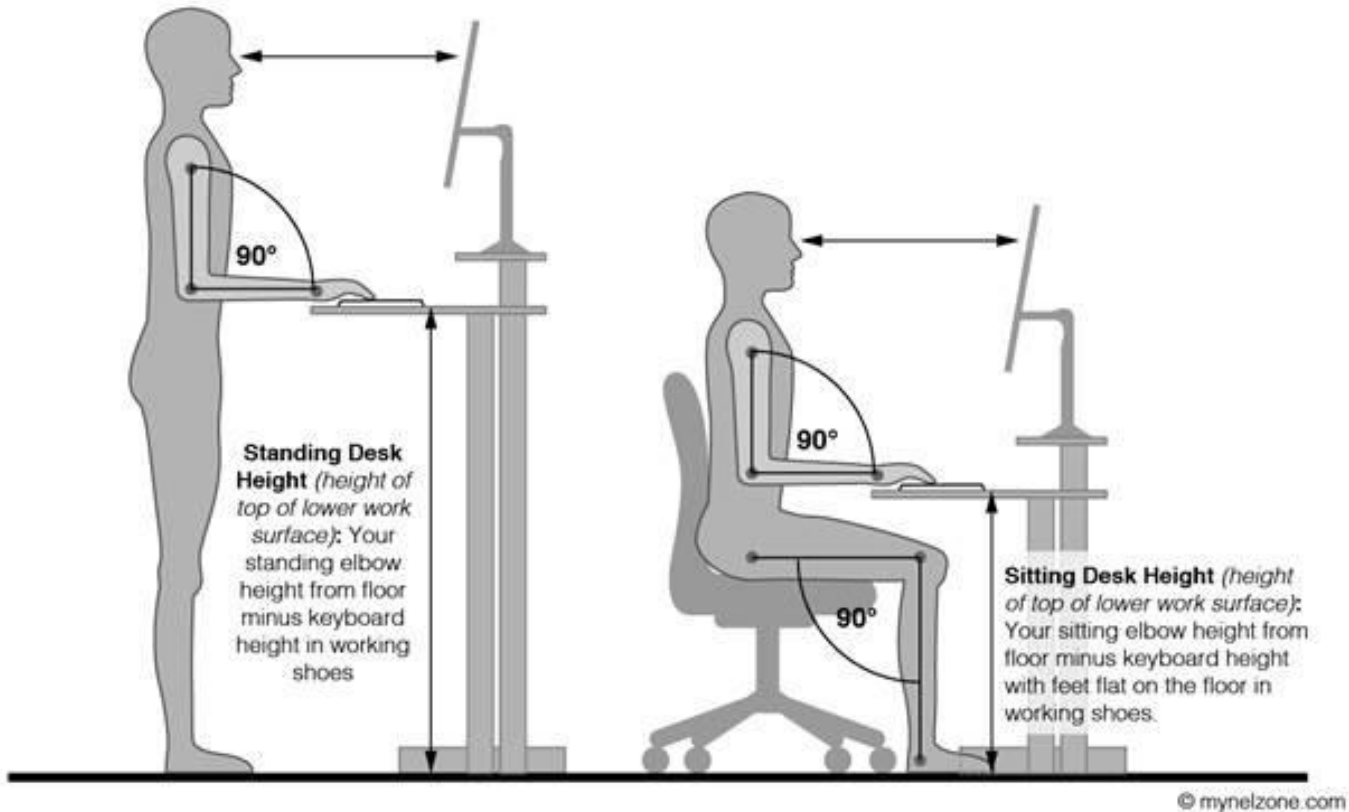


LOOK  
FEET AWAY **20**

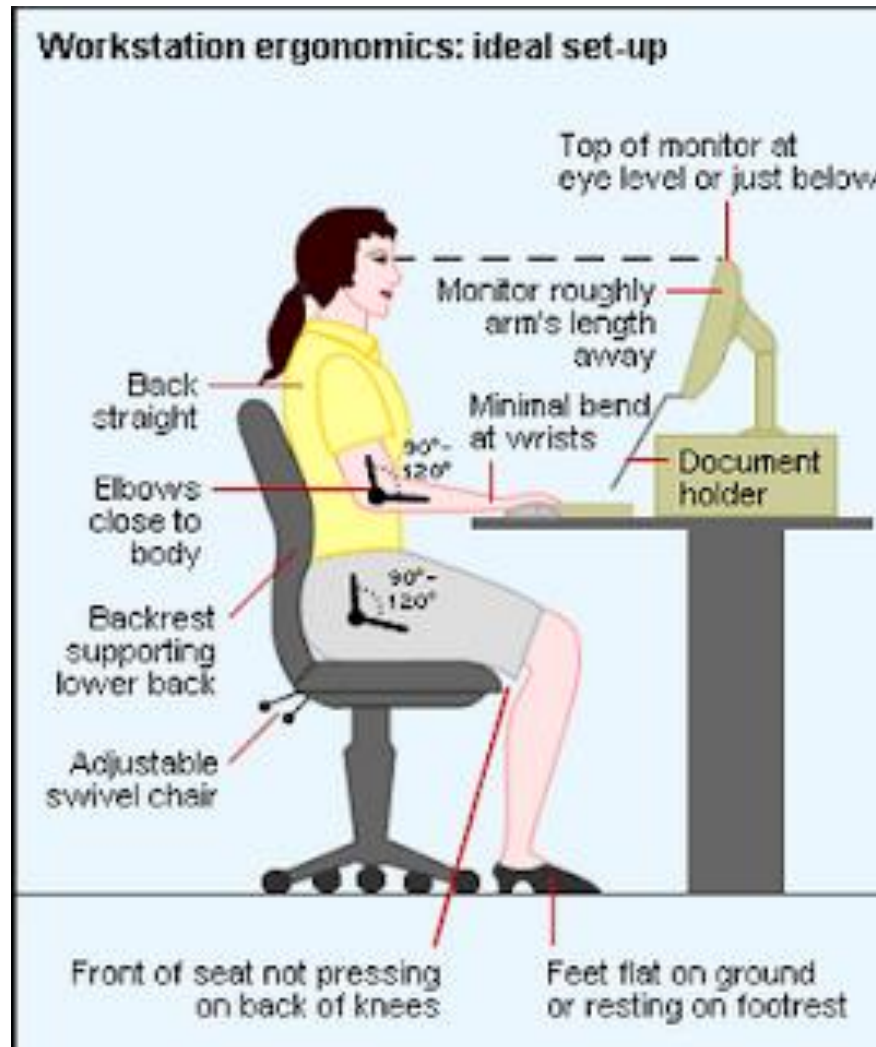


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# Standing Workstation



# Chair Adjustment



# Potential Issues

## Use of laptops:

- Position suggestions still the same.
- Use separate keyboard and mouse.
- Raise laptop so screen is at comfortable height.

## Non-Traditional Workspaces:

- Simulate office setting the best you can.
- Find comfortable chair that can be adjusted to comfort.



# Potential Issues Continued

Beware of “Ergonomic” products:

- Not all products fit people equally.
- Products designed with median population in mind.
- Best to have trial period.



# Questions?

